

What is claimed is:

1. A method for producing a phosphor having a high brightness, comprising steps of:

contacting a luminescent material containing Si and/or
5 Ge with an acid,
separating solid from the acid, and
drying an obtained solid.

2. The method according to Claims 1, wherein the luminescent material comprises the components (I) and (II),
10 (I) a compound comprising at least one selected from the group consisting of Ca, Sr and Ba, at least one selected from the group consisting of Mg and Zn and at least one selected from the group consisting of Si and Ge,
(II) at least one selected from the group consisting
15 of Eu and Mn as an activator.

3. The method according to Claims 2, wherein the luminescent material comprises a compound represented by the formula $mM^1O \cdot nM^2O \cdot 2M^3O_2$ (wherein, M^1 represents at least one selected from the group consisting of Ca, Sr and Ba; M^2
20 represents at least one selected from the group consisting of Mg and Zn; M^3 represents at least one selected from the group consisting of Si and Ge; m is from 0.5 to 3.5; n is from 0.5 to 2.5.) and at least one selected from the group consisting of Eu and Mn as an activator.

25 4. The method according to Claims 1, wherein the acid

is at least one selected from the group consisting of organic acid and inorganic acid.

5. The method according to Claims 4, wherein the inorganic acid is at least one selected from the group
5 consisting of hydrochloric acid, nitric acid and sulfuric acid.

6. The method according to Claims 5, wherein the inorganic acid is hydrochloric acid.

7. The method according to Claim 1, wherein the water
10 solution of acid has a hydrogen ion concentration of 0.001 mol/l or more.

8. The method according to Claims 1, wherein the phosphor is a phosphor for a vacuum ultraviolet ray-excited light-emitting element.

15